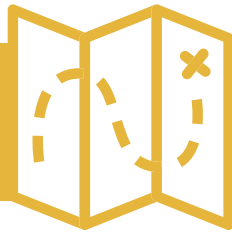


# STUDY PLAN



## Cisco CCNA ICND2 200-105 v3.0

Total Videos: **71**

Time: **18 hours\***

\*The time indicated above represents the total time to view all videos in the course, but does not include time spent using virtual labs, practice exams, embedded quizzes, etc.

## Cisco CCNA ICND2 200-105 v3.0

The [Cisco Certified Network Associate – Routing and Switching \(CCNA R&S\)](#) certification is designed for entry-level networking professionals. The CCNA R&S certification is made up of two exams, both of which are covered by CBT Nuggets training:

- [Cisco CCENT/CCNA ICND1 100-105](#)
- [Cisco CCNA ICND2 200-105](#)

In order to earn your CCNA R&S, you must complete the ICND1 exam first, which results in the [Cisco Certified Entry level Network Technician \(CCENT\)](#) certification.

The second exam for the CCNA R&S is the ICND2 which tests your knowledge and skills to successfully install, operate, and troubleshoot a small to medium-size enterprise branch network, including topics on LAN switching technologies, IP routing technologies, IP services (FHRP, syslog, SNMP v2 and v3), troubleshooting, and WAN technologies.

## Exam Details

**Time allotted for exam:** 90 minutes

**Number of questions:** 45-55 questions per exam

**Passing score:** Cisco does not publish the passing score for its exams

**Question types:** Multiple choice/single answer; Multiple choice/multiple answer; Drag and drop; Fill-in-the-blank; Simulation; Testlet; Simlet

**Exam registration:** [Pearson VUE](#)

**Exam cost:** \$165 (USD) \*[Learn more about exam fees from Pearson VUE](#)

**Exam topics:** [Interconnecting Cisco Networking Devices Part 2 \(200-105 ICND2\)](#) (free resource)

## STUDY STRATEGIES

Learners use a great variety of strategies to attack their training. Here are some options you can choose from to get the most out of your training experience:

Proceed through all CBT Nuggets video training on double-speed to develop a strong overview of the material; then proceed through all the training for a second time, taking good notes and focusing on deeper learning.

**OR**

Proceed through all CBT Nuggets video training, taking good notes and focusing on deep learning on the first pass; then proceed back through all training a second time, using double-speed when appropriate.

Supplement all video training with book study and practical application of knowledge.

Develop a test environment where new skills can be practiced.

Learn more about how to get all you can out of your practice exam experience from a quick video by Keith Barker



## PRACTICE EXAM STRATEGIES

CBT Nuggets offers practice exams as part of your subscription. You can take the practice exams as many times as you like! Here are some tips to help you take full advantage of this excellent resource:

### ! PLAN TO TAKE THE PRACTICE EXAM 3 TIMES

#### FIRST EXAM

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Create a baseline against which you can measure your progress with future exams.

Identify areas of weakness in order to direct your training as you move forward.

#### SECOND EXAM

---

Measure your progress since your first practice exam! Ask yourself: Are you retaining the information and material you learned at the beginning of your training? Are there areas to which you should return now to ensure your understanding before moving forward?

The results from your second practice exam experience should help you identify areas where you may need to spend extra effort and energy in the training ahead.

#### THIRD EXAM

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Measure your progress against your first two practice exams! Ask yourself: Are you scoring 90% by now? If so, you might be ready for the real thing!

Allow the results from your practice exam to direct your review ahead of your certification exam. Ask yourself: Are you retaining all the material? And are you understanding it well?

KEY

### 17. Switch Services Stacking and Chassis Aggregation

7 min.



The number and title for each video corresponds to the number and title you will find on the Cisco CCNA ICND2 200-105 course page online (and on your mobile device).

The duration of the video.

This course includes hands-on virtual labs, designated by this icon

The Extra Mile section of your study plan challenges you to dig a little deeper with your training. The Extra Mile might be a textbook recommendation, supplemental materials downloads, or other resources to help you take your training to the next level. Nothing in the Extra Mile is required, but it is here to help you learn.



"I would suggest each one of the lab modules (videos) on average, would take the learner initially **90 minutes** to complete. You might be able to go much faster if you watch me do it first and then simply repeat what I did. On the flip side, the lab experiences could potentially be longer if you go into them 'cold.'"



## Cisco CCNA ICND2 200-105

WEEK 1

### 1. Welcome to ICND2

7 min.

### 2. Review Lab Rebuilding ICND1

9 min.



### 3. Review Lab Step 1 Base Config

12 min.



### 4. Review Lab Step 2 IP Addressing, Speed, and Duplex

12 min.



### 5. Review Lab, Step 3 Enabling RIPv2 Routing

14 min.



Reminder: each virtual lab experience could take up to 90 minutes to complete.

EXTRA MILE

Explore the [Cisco website](#) to learn more about the CCNA ICND2 200-105 exam, its requirements, and available resources.

Set up your lab/test environment for practicing your new knowledge and skills. This week is a heavy labbing week as you work to review ICND1 in order to be ready for all the challenges ICND2 will present.

Consider purchasing a textbook to supplement your training: [CCNA Routing and Switching ICND2 200-105 Official Cert Guide](#) [CCNA ICND2 Study Guide: Exam 200-105](#) [CCNA Routing and Switching Complete Study Guide: Exam 100-105, Exam 200-105, Exam 200-125](#)

**6. Review Lab Step 4**

Static Routes, Default Routes

8 min.

**7. Review Lab Step 5**

Trunking, VTP, and VLANs

18 min.

**8. Review Lab Step 6**

Router on a Stick and DHCP Services

14 min.

**9. Review Lab Step 7**

Network Address Translation

11 min.

**10. Review Lab Step 8**

Standard ACLs

5 min.



Reminder: each virtual lab experience could take up to 90 minutes to complete.

**EXTRA MILE**

Create flashcards to quiz yourself on the content from your training! Or, use existing flashcard resources such as [quizlet.com](https://quizlet.com)

Join the [CBT Nuggets Learners Community](#) on Slack! Join other CBT Nuggets learners in a community where you can post questions, share study resources, and connect with IT experts from all over the world.

\*Please allow 48 hours for your request to join the community to be processed.

**11. Spanning Tree Protocol**

What Does STP Do?

14 min.

**12. Spanning Tree Protocol**

Understanding the Standards

10 min.

**13. Spanning Tree Protocol**

How the Root Bridge is Elected

16 min.

**14. Spanning Tree Protocol**

Will the Real Network Topology Step Forward

18 min.

**15. Spanning Tree Protocol**

Lab - Build, Configure, Test

22 min.

**16. Spanning Tree Protocol**

Portfast and BPDUGuard

8 min.

**17. Switch Services**

Stacking and Chassis Aggregation

7 min.

**EXTRA MILE**

Take the Practice Exam! Use the results to drive your review and practice ahead of your certification exam\*.

[Transcender Cisco Cert-200-105](#)

\*Keep in mind that you've not completed the training yet so you probably won't ace the exam. This helps you assess how well you are retaining the material you've learned so far!

**"Learning is not attained by chance, it must be sought for with ardor and diligence."**

- Abigail Adams

## WEEK 4

**18. Switch Services**

Security at Layer 2

13 min.

**19. Etherchannel**

Etherchannel is Awesome!

13 min.

**20. Etherchannel**

Configuring Etherchannel Bundles of Joy

21 min.

**21. IOS Software**

Fully Understanding the IOS Boot Process

18 min.

**22. IOS Software**

Lab – Upgrading the IOS

13 min.

**23. IOS Software**

Understanding IOS Licensing

6 min.

**EXTRA MILE**

Learn more about how to be successful on your exam by reading Anthony Sequeira's article, "[CCENT/CCNA Exam Strategies for Success](#)" on [Ciscopress.com](#).

Another light week of labbing. With a little more free time for training, take a few minutes to learn more about the exam from Jeremy Cioara's webinar, [CCNA v3.0: Everything You Need to Know](#).

## WEEK 5

**24. Core Routing**

The Routing Table (does not) Reveal All!

22 min.

**25. Core Routing**

Revising Routing Protocols

17 min.

**26. OSPF**

Protocol Overview

15 min.

**27. OSPF**

Neighbor Relationships

20 min.

**28. OSPF**

The DR and BDR

10 min.

**29. OSPF Lab**

Base Configuration

30 min.

**30. OSPF**

DR Election

11 min.

**EXTRA MILE**

Revisit your flashcards to ensure your learning! Check out the options at [quizlet.com](#) or continue working with your own.

Another lighter week of labbing. This is an excellent moment to do a little extra reading! Learn what to expect from the exam by reading Anthony Sequeira's [Exam Profile: Cisco 200-105 ICND2 v3.0](#) article from Pearson.

**"Practice does not make perfect. Only perfect practice makes perfect."**

*- Vince Lombardi*

WEEK 6

**31. OSPF Lab**  
Metric Adjustment

8 min.



**32. OSPF Lab**  
Passive Networks  
and Timer  
Configuration

12 min.



**33. OSPF Lab**  
Troubleshooting  
Single Area OSPF

21 min.



**34. OSPF Lab**  
Understanding  
Multiarea

11 min.

**35. OSPF Lab**  
Multiarea OSPF  
Configuration

17 min.



EXTRA  
MILE

This is a heavy labbing week! Take the time necessary to learn OSPF well and practice along with Jeremy.

**"The results you achieve will be in direct proportion to the effort you apply."**

*- Denis Waitley*

WEEK 7

**36. OSPF Lab**  
Implementing  
Summary Routes

12 min.



**37. OSPF Lab**  
Implementing  
Default Routing

9 min.



**38. EIGRP**  
Protocol Overview

18 min.

**39. EIGRP**  
Neighbors and  
Metric

13 min.

**40. EIGRP Lab**  
Base Configuration

15 min.



**41. EIGRP Lab**  
Route  
Summarization

17 min.



EXTRA  
MILE

Return to your flashcards this week to really master the memorization and acronyms for your exam! Visit [quizlet.com](https://quizlet.com) or continue working with your own flashcards.

Schedule your certification exam with an approved testing site.

**"No one succeeds without effort. Those who succeed owe their success to perseverance."**

*- Ramana Maharshi*

## WEEK 8

**42. EIGRP Lab**

Load Balancing

15 min.

**43. EIGRP Lab**Hello and Hold  
Down Timers

12 min.

**44. IPv6 Routing**IPv6 Addressing  
Review

8 min.

**45. IPv6 Routing**Configuring  
OSPFv3 Routing

13 min.

**46. IPv6 Routing**

IPv6 with EIGRP

6 min.

**47. WAN Technologies**Understanding  
Point-to-Point  
Connections

18 min.

**48. WAN Technologies**

Getting the Layer 2

13 min.

**49. WAN Technologies**Configuring a  
Point-to-Point  
Connection

10 min.

**EXTRA MILE**

Optional supplemental learning: [IPv6 - Concepts, implementation and verification of IPv6](#) with trainer Keith Barker. Consider watching this 34-video course to deepen your understanding of IPv6.

This week lightens up on the labbing. So, take advantage of the time to retake the PRACTICE EXAM! Use the results to identify areas you should return to for review.

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## WEEK 9

**50. WAN Technologies Lab**Configuring PPP  
Authentication

18 min.

**51. WAN Technologies Lab**Configuring PPP  
Multilink

10 min.

**52. WAN Technologies**

The WAN Revolution

11 min.

**53. Internet Technology**

Cable and DSL

10 min.

**54. Internet Technology Lab**

PPPoE Configuration

12 min.

**55. Internet Technology**Understanding VPN  
Solutions

18 min.

**EXTRA MILE**

Another light week of labbing. This is a good time to learn more about the ICND2 exam with some optional, supplemental training.

Exam Walkthrough: [Cisco ICND2/CCNA 200-101](#)\*

\*Consider watching this 8-video course with trainers Keith Barker and Anthony Sequeira to be fully prepared for the exam experience. Please note that this course addresses ICND2 v2.0, but still retains value and some truly excellent tips for exam success!

**“Develop a passion for learning. If you do, you will never cease to grow.”**

*– Anthony J. D’Angelo*



**56. Internet Technology Lab**

GRE Tunnel Implementation

12 min.

**57. Internet Technology**

Understanding BGP Fundamentals

22 min.

**58. Internet Technology Lab**

Basic BGP Configuration

34 min.

**59. Infrastructure Services**

Understanding HSRP

17 min.

**60. Infrastructure Services Lab**

Configuring HSRP

21 min.

**61. Infrastructure Services**

Understanding the QoS Dilemma

6 min.

**EXTRA MILE**

This is a slightly lighter labbing week. This is a good chance to revisit any labs from earlier in the course where you might need more practice.

Get back to your flashcards this week. Visit [quizlet.com](https://quizlet.com) or continue working with your own flashcards.

**"Success is not final, failure is not fatal; it is the courage to continue that counts."**

- *Winston Churchill*

**62. Infrastructure Services**

QoS Tools

20 min.

**63. Infrastructure Services**

RADIUS and TACACS+

20 min.

**64. Infrastructure Services Lab**

Configuring Extended ACLs

38 min.

**65. Monitoring Tools**

Understanding IP SLA

10 min.

**66. Monitoring Tools Lab**

Configuring IP SLA (and Beyond)

17 min.

**67. Monitoring Tools**

Understanding SNMP

12 min.

**EXTRA MILE**

Start drilling hard with your flashcards this week. You're on the home stretch now, so work hard! Visit [quizlet.com](https://quizlet.com) or continue working with your own flashcards.

Another light labbing week! Use the extra time to revisit any labs from earlier in the course where you might need more practice.

**"There are no secrets to success. It is the result of preparation, hard work, and learning from failure."**

- *Colin Powell*

**68. Monitoring Tools Lab**

Configuring SNMP

34 min.

**69. Monitoring Tools Lab**

Understanding and Configuring SPAN

6 min.

**70. Network Services**

Defining Software Defined Networking (SDN)

11 min.

**71. Network Services**

How Cisco Does SDN

16 min.

**CRAM SESSIONS!***Review training Nuggets where you might need to brush up.*

1-3 hrs.

**EXTRA MILE**

Retake the PRACTICE EXAM, one last time! Use the results to direct your final review ahead of the big day.\*

[Transcender Cisco Cert-200-105](#)

\*You should score around 90% or better on your practice exam to earn your certification.

**"It's what you learn after you know it all that counts."**

*- John Wooden*

**THE BIG DAY!****Take the exam.**

Get a good night's sleep ahead of your exam!



**Brag about it! Tweet us or let us know how your exam went and what you're doing to celebrate your success!**

## CAREER PATHWAYS

CBT Nuggets is committed to providing you with the resources necessary to plan your training, certification, and career pathway effectively and efficiently. Review our Career Pathway blog posts to learn more.

[Mapping Your IT Networking Career Pathway](#)

[Unlocking Your IT Security Career Pathway](#)

[Decoding Your IT SysAdmin Career Pathway](#)

[Charting Your IT Cloud and Virtualization Career Pathway](#)

[Engineering Your IT DevOps Career Pathway](#)

## Roadmap to Success: CCNA Routing and Switching

Learn more about the CCNA certification from the CBT Nuggets blog. The [Roadmap to Success: CCNA R&S](#) is part of a [series of blog posts](#) designed to help learners better understand certification pathways, career opportunities associated with those certifications, and next steps beyond certification.

## THE NEXT STEP

The CCNA R&S is a building block that enables learners to earn a variety of other certifications from Cisco. After earning the CCNA R&S, most learners take the next step by earning a CCNP (Cisco Certified Network Professional) R&S, or choose another CCNA specialization.

### CCNP

For those learners wanting to continue down the path of Routing and Switching, the next step is to earn the [Cisco Certified Networking Professional \(CCNP\) certification](#). The CCNP R&S certification is made up of three exams, all of which are covered by CBT Nuggets training:

[Cisco CCNP Routing and Switching 300-101 ROUTE](#)

[Cisco CCNP Routing/Switching 300-115 SWITCH](#)

[Cisco CCNP Routing/Switching 300-135 TSHOOT](#)

The CCNA is a prerequisite to any CCNP-level certification.

### Other CCNA Options

Once you have earned your CCNA Routing and Switching certification, additional CCNA-level certifications are typically just one exam away. Among CBT Nuggets learners who have earned the CCNA R&S, the most highly sought-after CCNA certifications are (in order of popularity):

[CCNA Security](#) (made up of just one additional exam: [210-260 IINS](#))

[CCNA Wireless](#) (made up of just one additional exam: [200-355 WIFUND](#))

[CCNA Data Center](#) (made up of two exams: [640-911 DCICN](#) and [640-916 DCICT](#))

[CCNA Collaboration](#) (made up of two exams: [210-060 CICD](#) and [210-065 CIVND](#))

[broken into two CBT Nuggets courses: [210-065 CIVND1](#) and [210-065 CIVND2](#)]

The CCNA R&S puts you on the path to a career in networking, but also opens up other pathways as well. Consider these pathways as you move beyond your CCNA.

## ENTRY LEVEL

## INTERMEDIATE

## ADVANCED

### NETWORKING

Juniper  
JNCIA-Junos

Cisco CCNP  
Routing and  
Switching

Juniper  
JNCIS-ENT

Palo Alto  
Networks  
Firewall

Cisco CCIE  
Routing and  
Switching

### SECURITY

CompTIA  
Security+

CCNA Security

CCNP  
Security

EC-Council  
Certified Ethical  
Hacker

Penetration  
Testing with  
Linux Tools

Juniper  
JNCIS-SEC

(ISC)<sup>2</sup>  
CISSP 2015

### VIRTUALIZATION

Cisco CCNA  
Data Center

VMware  
VCA-DCV

Cisco CCNP  
Data Center

Cisco Data  
Center Unified  
Fabric Support  
Specialist

MCSE: Private  
Cloud / MCSE  
Cloud Platform  
and Infrastructure

VMware  
VCP6-DCV

### CLOUD COMPUTING

AWS: Technical  
Essentials

AWS: Certified  
Solutions  
Architect-  
Associate

MCSE: Private  
Cloud / MCSE  
Cloud Platform  
and Infrastructure

AWS: Certified  
SysOps Admin  
Associate

### SYSTEM ADMINISTRATION

MCSA  
Windows  
Server 2012

PowerShell 4  
Foundations

MCSA:  
Office 365

MCSE: Server  
Infrastructure  
/ MCSE Cloud  
Platform and  
Infrastructure